	Application No.	Applicant(s)
Notice of Allowability	10/525,631	ROSCH ET AL.
	Examiner	Art Unit
·	Suna H. Bak	2874
	Sung H. Pak	20/4
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>amendment filed 1/17/2007</u> .		
2. The allowed claim(s) is/are <u>9-18 and 20</u> .		
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) ⊠ All b) ☐ Some* c) ☐ None of the:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3.  Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ol>		
Attachment(s)		
1. Notice of References Cited (PTO-892)	5. Notice of Informa	l Patent Application
2. Notice of Draftperson's Patent Drawing Review (PTO-948)	6. Interview Summa	ary (PTO-413), Date
3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date	Paper No./Mail I 7.	ndment/Comment
4.   Examiner's Comment Regarding Requirement for Deposit	8. 🛭 Examiner's State	ment of Reasons for Allowance
of Biological Material	9.	
	,	

## **DETAILED ACTION**

Applicants' amendment filed 1/17/2007 has been entered. All pending claims have been carefully reconsidered in view of the amendment.

## Allowable Subject Matter

Claims 9-18, 20 are allowed.

The following is an examiner's statement of reasons for allowance:

Optoelectronic devices having integrated optical components are well known in the art. Typical prior art devices may comprise plurality of optical processing elements integrated into one planar light circuit substrate. Koh et al reference (US 6,801,679 B2) is perhaps the closest prior art device with respect to pending claims of the present application. Koh reference discloses a planar light circuit device having optical waveguide layer and plurality of optical processing devices integrated onto a single substrate. Optical processing devices of Koh may include optical filters, multiplexers, demultiplexers, etc (see column 5 lines 12-51).

However, none of the prior art fairly teaches a apparatus comprising, inter alia, a multiplexer, demultiplexer, optical filter, MEMs system, and optical amplifier <u>all formed within</u> at least one optical layers <u>integrated within a multiplayer printed circuit board</u>, wherein the <u>multiplayer printed circuit board</u> comprises at least two of the plurality of electrically insulating layers separated by at least one of the plurality of optical layers, in the manner claimed in the instant application.

Application/Control Number: 10/525,631

Art Unit: 2874

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (571) 272-2353. The examiner can normally be reached on Monday- Friday, 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571)272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sung H. Pak

Primary Patent Examiner

Art Unit 2874